IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. - 7. (Cancelled).

8. (Previously Presented) A disk drive comprising:

a disk medium having a substrate, a magnetic recording layer and a soft magnetic layer interposed between the substrate and the magnetic recording layer; and

a magnetic head having a read head element for detecting a magnetic field from the magnetic recording layer and shielding members to shield the read head element,

wherein parameters are set for the disk medium and the magnetic head to satisfy a relation

$$tg(\mu\text{-}\pi 4\ (1\text{-}\exp(\text{-}\pi t/g))) < 2\pi d(d+t) \text{ where}$$

t: the thickness of the soft magnetic layer;

μ: the permeability of a direction perpendicular to the surface of the soft magnetic layer when an influence of a diamagnetic field is removed;

g: a distance from one of the shielding members to another one of the shielding members with the read head element disposed between said one and said another one of the shielding members; and

d: a spacing distance from the surface of the soft magnetic layer to a proximal end of the magnetic head.

9. – 11. (Cancelled).

12. (Previously Presented) The disk drive according to claim 8, wherein the magnetic head includes a write head element to allow a perpendicular magnetic recording operation to be performed on the disk medium and further comprising a system for a perpendicular magnetic recording.

13. (Previously Presented) The disk drive according to claim 8, wherein the read head element includes a magnetoresistive element arranged between the shielding members and wherein the magnetic head includes a write head element to allow a perpendicular magnetic recording operation to be performed on the disk medium, the write head element being separate from the read head element.

14. (Previously Presented) The disk drive according to claim 8, wherein the read head element includes a magnetism-detection element including a giant magnetoresistive element.